

IN THE SPECIFICATION:

Please insert the following heading on page 1, after the title:

BACKGROUND OF THE INVENTION

Please amend the subheading on page 1, line 6 as follows:

TECHNICAL FIELD OF THE INVENTION

Please amend the subheading on page 1, line 14 as follows:

BACKGROUND DESCRIPTION OF THE RELATED ART

Please amend the subheading on page 2, line 22 as follows:

DISCLOSURE SUMMARY OF THE INVENTION

Please amend the paragraph on page 3, line 3 as follows:

According to the present invention, there is provided a method of measuring a three-dimensional surface shape of a workpiece by moving a three-dimensional measuring unit mounted on a robot to trace a surface of the workpiece, comprising [[the]] a first step of setting and recording block data representing a measuring operation to cause the three-dimensional measuring unit to trace a predetermined area, [[the]] a second step of setting a length and/or a height of the workpiece, [[the]] a third step of selecting one of a plurality of basic shape types

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which is similar to a shape of the workpiece, [[the]] a fourth step of duplicating the block data such that a hypothetical block representing the block data covers an area to be measured of the surface of the workpiece which is projected onto a hypothetical space, depending on the selected basic shape type and the length and/or the height of the workpiece, and [[the]] a fifth step of measuring the surface shape of the workpiece based on the duplicated block data.

Please amend the paragraph on page 4, line 10 as follows:

In the fourth duplicating step, the block data may be deformed and duplicated to make the method highly flexible with respect to workpieces available in a variety of types.

Please amend the paragraph on page 4, line 13 as follows:

In the fifth measuring step, after the surface shape is measured based on predetermined block data and when the surface shape is measured based on next block data, a base of the robot may be moved in positional alignment with the next block data to allow the block data to be duplicated without the need for changing parameters. Therefore, the process of duplicating the block data is easily performed.

Please amend the paragraph beginning on page 4, line 23 as follows:

According to the present invention, there is also provided a method of measuring a three-dimensional surface shape of a workpiece by moving a three-dimensional measuring unit

mounted on a robot to trace a surface of the workpiece, comprising [[the]] a step of setting a basic path for moving the three-dimensional measuring unit a predetermined distance, and [[the]] a step of duplicating the basic path a plurality of times at predetermined intervals to set block data representing a measuring operation to cause the three-dimensional measuring unit to trace the surface of the workpiece.

Please amend the paragraph on page 5, line 7 as follows:

[[As]] Because the block data can be set by duplicating one basic path, the process of setting the block data is easily performed.

Please delete the subheading on page 7, line 23 as replace with the following subheading:

DETAILED DESCRIPTION OF AN EXEMPLARY EMBODIMENT

Please amend the paragraph on page 9, line 6 as follows:

The movable carriage 22 with the articulated robot 14 placed thereon is self-propelled for movement along a rail 26 that extends parallel to a propeller shaft axis 24 of the workpiece W. Since Because the articulated robot 14 is movable, after a certain area of the workpiece W has been measured, the articulated robot 14 is moved to measure a next area of the workpiece W.

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Please amend the paragraph beginning on page 9, line 26 as follows:

~~Since~~ Because the articulated robot 14 has the seven-axis joints, the articulated robot 14 has attitude redundancy as described above so as to be freely movable as with a human arm.

Please amend the paragraph on page 13, line 3 as follows:

The computer 58 has an external signal monitoring unit 110 for manually operating or stopping, in an emergency, the articulated robot 14 and the propelling shaft motor 64 based on a switch signal supplied from the operating box 68 or the like.

Please amend the paragraph beginning on page 14, line 22 as follows:

The processing of steps S2, S3 may be dispensed with for workpieces W having similar shapes. The processing of steps S2, S3 is basically performed by programmed operation of the computer 58 to duplicate the block data 120 such that the workpiece W is covered with the block data 120 in a hypothetical space. To allow the operator to judge whether or not the processing is performed properly or not with ease, the workpiece W and the block data 120 in a hypothetical space may be displayed in a graphic pattern on the monitor screen 66a during the processing.